

2024 Water Quality Report
Turners Falls Water Department
226 Millers Falls Road
Turners Falls, Massachusetts 01376-1605
PWS ID#1192000

We are once again proud to present our annual water quality report, covering all testing performed between January 1 and December 31, 2024. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies. For more information about this report, or for any questions relating to your drinking water, please call Jeffrey Hildreth, Water Department Superintendent or Suzanne Leh, Clerk/Collector at (413) 863-4542.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the first Wednesday of each month, beginning at 4:30 p.m. at the Water Department Office, 226 Millers Falls Road, Turners Falls. Our Annual Meeting of the Turners Falls Fire District is held in the spring.

2024 Board of Water Commissioners: Bruce Merriam, Edward Pelis, John Miner. Certified Water Operators: Stephen Fitzpatrick, Austin Felix. Water Operator: Anthony Peterson

Where Does My Water Come From?

The Turners Falls Water Department's main source of water consists of one ground water artesian well located off Center Street in Montague Center. Gravel-packed Well#1192000 2G pumps *1.2 to 2 million gallons of water per day* to the filter plant. At the plant, the water is sand filtered for the removal of iron and manganese; then treated, filtered water is then discharged into the gravity-fed distribution system. The Hannegan Brook Well located near Lake Pleasant can yield 1.44 MGD to meet future water demands. The water quality is good and only requires the addition of water treatment chemicals for pH adjustment. The storage facilities in Turners Falls have a total storage capacity of 6.3 million gallons. Lake Pleasant and Green Pond are emergency backup surface water supplies. Please call Jeff or Suzanne to answer any questions at

(413) 863-4542, e-mail: clerk@turnersfallswater.com, superintendent@turnersfallswater.com or www.turnersfallswater.com

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the MA Department of Environmental Protection (MassDEP) and the U.S. Environmental Protection Agency (U.S. EPA) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include: Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife; Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; Pesticides and Herbicides, which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which may also come from gas stations, urban storm water runoff, and

septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water.

Here are a few tips: Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.

Turn off the tap when brushing your teeth.

Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Write down the meter reading before going to bed at night or leaving for a day. Include all numbers, write down the new reading in the morning and subtract the prior reading. If there has been a change it is probably due to a leak.

What is a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals.

Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. For more information, review the Cross-connection Control Manual from the U.S. EPA's Web site at <http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm>. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment, Protecting Turners Falls Water Supply

The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program (SWAP) for the water supply source serving this water system. This report is a planning tool to support local and state efforts to improve water supply protection. Although the TFWWD has many safeguards in place, the overall susceptibility ranking to contamination of the groundwater supplies is HIGH, based on the presence of numerous high-ranking threat land-uses within the Zone II water supply protection areas. The report commends our water system on its proactive approach to source protection. A complete SWAP report is available at the TFWWD, the Board of Health office, and online at <http://www.mass.gov/dep/water/drinking/swapreps.htm>. For more information, call the TFWWD at 863-4542.

Things You Can Do to Protect Our Water Supply Take used motor oil and other such fluids to the town's hazardous waste collection sites, Use fertilizers and pesticides sparingly and do not use the riverbeds to dispose of any waste.

Lead in Drinking Water

How does lead get in my drinking water?

In Massachusetts, most drinking water sources like reservoirs and groundwater are lead free. When lead is present in water, it is typically due to the water flowing through lead pipes or plumbing in homes with lead parts or solder. Service lines, which are the pipes that connect your home to the water main, could have lead in them. Inside your home, you may have lead pipes, copper pipes connected with lead solder, or brass faucets or fittings containing lead. Lead levels are highest when the water has been sitting in lead pipes for several hours. Hot water causes lead to enter water faster.

How does lead get into my body?

In many cases, most exposure to lead is from paint dust, paint chips and soil contaminated with lead. Lead can also get into your body by drinking or cooking with water containing lead. Young children absorb lead more easily than adults, and lead can be passed from a mother to her unborn child. For these reasons, lead in drinking water can be an important source of exposure for pregnant women, young children, and infants that are fed powdered formula.

Lead is not absorbed through the skin. Bathing or showering in water containing lead should be safe.

What can I do right now to protect my family?

Run your water before using and use COLD water. Always use cold water for drinking and cooking. Do not use hot water for cooking or baby formula. Hot water usually has higher lead levels than cold water. Running the water before using will usually reduce any lead levels by flushing out the water that has been sitting in lead pipes for several hours.

Boiling water does not eliminate lead. If there is lead in your water, boiling it will increase lead levels.

Statement from Environmental Protection Agency:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. Turners Falls Water Dept. is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula.

Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formulas, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water, and wish to have your water tested, contact Turners Falls Water Dept. at (413) 863-4542.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at

<https://www.epa.gov/safewater/lead>

Turners Falls Water Quality Data

During the past year, we have taken many water samples to determine the presence of any contaminants and to comply with state and federal drinking water quality parameters. The tables below show only those contaminants that were detected in the water. MassDEP has reduced the monitoring requirements for *volatile organic contaminants*, *inorganic contaminants*, *synthetic organic contaminants*, and *perchlorate* because the sources are not at risk of contamination. The last sample collected for these contaminants was taken on the following dates and was found to meet all applicable US EPA and MassDEP standards.

VOC's: 11/8/2023

IOC's: 8/10/2020

SOC's: 7/22/2021

Perchlorate: 8/16/2023

Tap water samples were collected for Lead and Copper analyses from sample sites throughout the community.

Our next round of lead and copper sampling will be in 2025.

Substance (Unit of measure)	Date Collected	90 th percentile	Action Level	#MCLG	# of sites sampled	Range of Tap Sampling Results	# of sites above Action Level	Possible source of Contamination
Lead (ppb)	7/9/2024 7/10/2024	0	15	0	20	0-1.7	0	Corrosion of household plumbing systems. Erosion of natural deposits
Copper (ppm)	7/9/2024 7/10/2024	0.0330	1.3	1.3	20	0-0.0795	0	Corrosion of household plumbing. Erosion of natural deposits; leaching from wood preservation

Service Line Inventory

The Turners Falls Water Dept. was required to conduct an inventory of service line materials throughout its distribution system. This inventory can be obtained at our Office located at 226 Millers Falls Rd, Turners Falls MA 01376 M-F 8:30 to 4:30. The inventory will inform you of known and unknown pipe materials currently in place at all of our water service customers.

Tap water samples were collected monthly for Bacteria analyses throughout the community.

A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify any problems that were found during these assessments.

During the past year, TFWD has been required to conduct one Level 1 Assessment. One Level 1 Assessment was completed. In addition, we were required to take a corrective action, and we have completed and comply with the action. Attached is a copy of the Assessment completed in 2024.

Secondary Contaminants	Date Collected	Result or Range Detected	Average Detected	SMCL	ORSG or Health Advisory	Possible Sources
Manganese	8/6/2024	0-.003 ug/L	.0015ug/L	50 ug/L	300*	Natural sources as well as discharges from industrial uses.
Sodium	08/16/2023	10.3-11.1 mg/L	10.7 mg/L	20 mg/L		Discharge from the use and improper storage of sodium-containing de-icing compounds or in water softening agents
Iron	8/6/2024	ND	ND	300 ug/L		Naturally occurring, corrosion of cast iron pipes
Radioactive Contaminants						
Gross Alpha Particle Activity	8/21/2024 8/22/2024	ND- 0.24 pCi/L	0.12 pCi/L	15 pCi/L		Erosion of Natural Deposits
Radium 226 & 228 (combined values)	8/21/2024 8/22/2024	ND- 0.72 pCi/L	0.36 pCi/L	5 pCi/L		Erosion of Natural Deposits
Inorganic Contaminants				MCL	Violation	
Nitrate	8/21/2024 8/22/2024	ND-0.123 mg/L	0.0615	10 mg/L	NO	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

*US EPA and Mass Dep have established public health advisory levels for manganese to protect against concerns of potential neurological effect and a one day and 10 day HA of 1000 ppb for acute exposure.

PFAS SAMPLING

On October 2, 2020, MassDEP published its PFAS public drinking water standard or Massachusetts Maximum Contaminant Level (MMCL) of 20 nanograms per liter (ng/L), or parts per trillion (ppt) applicable to community (COM) and non-transient non-community (NTNC) systems for the sum of the concentrations of six specific PFAS. This drinking water standard is set to be protective against adverse health effects for all people consuming the water.

The Turners Falls Water Department did take samples in 2021, 2022, 2023 and 2024 and has had No Detects for PFAS.

Definitions

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

mg/L: Milligram per liter

MRDL (Maximum Residual Disinfectant Level): The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L: picocuries per liter

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

ug/L: Microgram per liter